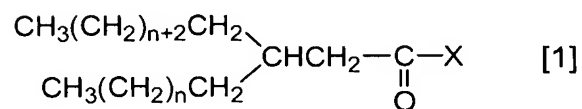


IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A carbonyl compound represented by the following formula [1],



wherein X is hydrogen, a hydroxy group, an alkoxy group or a group derived from a polyol,
and n, which is the same in each instance, is 4 to 30.

2. (Original) The carbonyl compound according to claim 1 wherein n of the formula [1] is 4 to 20.

3. (Original) The carbonyl compound according to claim 1 wherein n of the formula [1] is an even number of 4 to 10.

4. (Original) The carbonyl compound according to claim 1 wherein n of the formula [1] is 6.

5. (Original) The carbonyl compound according to claim 1 wherein X of the formula [1] is an alkoxy group (-OR) and R is a hydrocarbon group with 6 to 30 carbon atoms.

6. (Original) The carbonyl compound according to claim 1 which is an ester compound derived from a hindered alcohol.

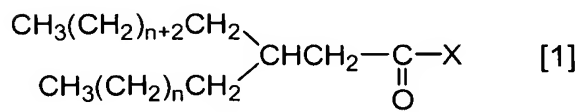
7. (Original) The carbonyl compound according to claim 6 wherein the hindered alcohol is a compound selected from trimethylolpropane, trimethylolethane, and neopentylglycol.

8. (Original) A synthetic lubricant comprising the carbonyl compound according to any one of claims 1 to 7.

9. (Original) A cosmetic base material comprising the carbonyl compound of claim 5.

10. (Original) A plasticizer comprising the carbonyl compound of claim 5.

11. (Currently Amended) A method for producing ~~the a~~ carbonyl compound ~~according to claim 1 comprising the steps of~~ represented by the following formula [1],



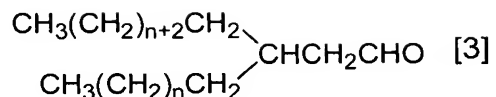
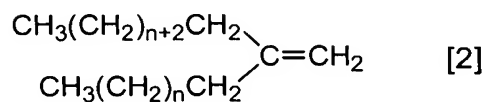
wherein X is hydrogen, a hydroxy group, an alkoxy group or a group derived from a polyol,

and n, which is the same in each instance, is 4 to 30, comprising:

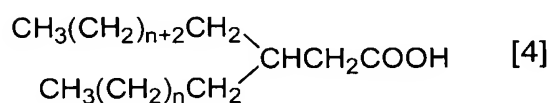
(a) dimerizing a compound represented by $\text{CH}_3(\text{CH}_2)_{n+2}\text{CH}_2\text{CH}=\text{CH}_2$ (wherein n is 4 to 30)

by using a metallocene catalyst to synthesize a vinylidene compound of the following formula [2], and

(b) reacting the vinylidene compound of the following formula [2] with carbon monoxide and hydrogen under oxo reaction conditions to synthesize an aldehyde compound of the following formula [3]:



12. (Currently Amended) The method according to claim 11 further comprising ~~the step of~~:
 (c) oxidizing the aldehyde compound of the formula [3] under oxidizing reaction conditions to synthesize a carboxylic compound of the following formula [4]:



13. (New) The carbonyl compound according to claim 1 wherein X is hydrogen.
14. (New) The carbonyl compound according to claim 1 wherein X is a hydroxy group.
15. (New) The carbonyl compound according to claim 1 wherein X an alkoxy group.
16. (New) The carbonyl compound according to claim 1 wherein X is a group derived from a polyol.